Applicant : Ronald P. Knockeart et al.   Attorney Docket: 09650-005006 / 2003P11511US
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<center>REMARKS</center>

The applicant has amended the abstract.

Below, the applicant's comments are preceded by related remarks of the examiner set forth in small bold type.

Claims 11, 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karmel (US 6,353,743) in view of Ito (US 5,990,825).

As per claim 11, Karmel teaches a method for tracking a mobile object comprising: receiving a reference signal from satellite of a positioning system and computing position data related to the location of the mobile object using the reference signal (col. 5, lines 14-17); transmitting the position data from the mobile object to a server (col. 5, lines 18-19); at the mobile object, receiving the server position correction data and determining estimate coordinates of the vehicle by combining data computed from the received reference signal and the position correction data (col. 5, lines 22-28). Karmel does not teach that the mobile object is a vehicle and computing the position data using the same received position correction data for an interval and not to use the received correction data at a subsequent interval of time. However, determining position of a mobile object such as a navigation device, a cell phone, or a PDA, which is implemented on a vehicle would have been well known. Further, Ito suggests including the rate of correction value RRC indicating range rate correction (col. 4, lines 46-49; col. 5, lines 3-5), since the correction occurs at certain range rate indicated by the RRC variable, when the vehicle is within the indicated range rate, the same correction value is obviously used in the time interval the vehicle is within the range rate, and when the vehicle is subsequently out of the range rate indicated by the RRC of Ito, the same correction value is obviously not used anymore, instead a new correction value will be used. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the range rate indication of Ito to the system of Karmel in order to facilitate updating correction value at appropriate range.

The Examiner acknowledges that Karmel does not disclose or suggest "computing the position data and determining the estimated coordinates are performed repeatedly for an interval of time using the same received position correction data, and subsequent to the interval of time, are performed repeatedly without using the received correction data, " as recited in claim 11. The Examiner contends that what is missing in Karmel can be found in Ito, and characterizes Ito as teaching:

when the vehicle is within the indicated range rate, the same correction value is obviously used in the time interval the vehicle is within the range rate, and when the vehicle is subsequently out of the range rate indicated by the RRC of Ito, the same correction value is obviously not used anymore, instead a new correction value will be used. (office action, page 3, lines 10-14)

The applicant does not agree with the Examiner's characterization of Ito, and does not agree that Ito provides what is missing from Karmel. What Ito in fact discloses is the use of a range rate correction RRC. The RRC "represents the rate of the correction value, and the correction value at an arbitrary time is interpolated at DGPS receiver 20 based on PRC and this RRC." (col. 4, lines 46-49) The range rate correction RRC represents the rate of change of the pseudorange correction PRC over time. PRC "is a correction value of the pseudorange with each GPS satellite, and is the difference in the pseudorange of the GPS satellite and reference station 10 calculated from the radio wave received from the respective GPS satellite, and the range with the GPS satellite calculated from the true position of reference station 10." (col. 4, lines 33-39).

Thus, Ito discloses the use of two correction values: PRC for correcting pseudoranges of GPS satellites, and RRC for correcting changes in PRC over time. At an arbitrary time, the amount of correction can be determined based on the PRC and RRC using an interpolation method based on a time since the PRC was obtained. The RRC does not indicate a time interval such that position correction data is used within this time interval, and not used when outside of this time interval, as the Examiner appears to contend.

Therefore, neither Karmel nor Ito discloses or suggests "computing the position data and determining the estimated coordinates are performed repeatedly for an interval of time using the same received position correction data, and subsequent to the interval of time, are performed repeatedly without using the received correction data."

Independent claims 15 and 16 are patentable for at least similar reasons as claim 11.

The dependent claims, including newly added claims 27-30, are patentable for at least the same reasons as the claims on which they depend.

Any circumstance in which the applicant has addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner. Any

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circumstance in which the applicant has made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims. Any circumstance in which the applicant has amended a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Enclosed is a $450.00 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050, referencing attorney docket 09650-005006.

Respectfully submitted,

Date: 2/23/2005

Rex Huang* for
J. Robin Rohlicek, Reg. No. 43,349

PTO Customer No. 26161
Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906

See attached document certifying that Rex Huang has limited recognition to practice before the U.S. Patent and Trademark Office under 37 CFR § 10.9(b).

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